

Program 2 - US State List: Write Up

Description:

This program is a state management application that uses a linked list to handle U.S. state data, including name, capital, region, and year founded. Users can add, remove, display, and save states, along with a feature to sort the data in either ascending or descending order.

Files & Class Information:

- Driver
 - Program flow
 - Menu system
 - Add
 - Remove
 - Save
 - Display
 - Exit Program
- LinkedList.h
 - Members:
 - struct Listnode
 - *head
 - *tail
 - Int numNodes
 - Public functions:
 - Constructor

- Destructor
- isEmpty
- getLength
- Prepend
- Insertion
- Append
- Deletion
- Pop
- Display
- Public “friend” functions
 - Stream operator << for printing
- StateData.h

Private:

- Name
- Capitol
- Region
- yearFounded

Public:

- state(constructor)
- ~state(destructor)
- add
- remove
- display

- StateData.cpp
 - Function definitions
- StateManager.h
 - Private:
 - numOfStates
 - linkedList<State> statelist
 - Public:
 - stateManager(constructor)
 - ~stateManager(destructor)
 - add
 - remove
 - display
 - initialAdd
- StateManager.cpp
 - Function definitions
- Makefile
- TEST_CASE.txt
 - Tests every case of program

Team Members:

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